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Chapter 21

Inclusive Built Heritage as a Matter of Concern: A Field Experiment

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21.1 Introduction

Europe's built heritage is the world's most diverse and rich patrimony, and an important component of individual and collective identity. Its societal relevance is inextricably linked to sustainability: by opening up built heritage and using it appropriately, its upkeep is best secured and its protection from decline guaranteed (Adriaenssens *et al.* 1998; Gobyn & Knops 2000). Integrated conservation therefore strives to give built heritage a contemporary role in society. At the same time, inclusion policy strives for all people's participation in society, which requires that environments can be reached, entered, interpreted and used by people with diverse and evolving abilities.

When built heritage plays a contemporary role in society, and different people participate in society, both meet. Making built heritage inclusive—*i.e.* reachable, accessible, understandable and usable for as many people as possible—is a highly complex matter, however. Proposals to make historic buildings more inclusive, tend to raise objections from conservation authorities, which guard the historic values of built heritage. Current approaches to accessibility do not seem to deal with these concerns well. Particularly telling in this respect is the accessibility legislation for public buildings recently issued in the region of Flanders: monuments that are provisionally or definitely protected, or building sites located in (provisional or definite) conservation areas, are exempt from its application. In this relatively little region, this comes down to no less than 10,000 buildings listed as protected. Built heritage thus remains beyond reach, both practically—from the perspective of disabled people—and legally—in terms of building regulation.

Is making built heritage (more) inclusive really beyond reach, the proverbial exception to the rule? Or can we address it from a different angle? This paper reports a field experiment that addresses inclusivity of built heritage in a different way, by allowing a group of people to become *concerned with* this issue. The context of the field experiment is a European university, whose campus features a considerable number of protected buildings. After introducing the origins and set-

up of the experiment, we report what insights it yielded so far, how these are received by different people and how they impact the real-world situation on campus. We draw on field notes and pictures taken during participation in building visits, analysis reports, and written and oral accounts of different people involved in or affected by the experiment. After comparing the approach explored with more traditional ways of addressing inclusivity of built heritage, we conclude by questioning its transferability to other real-world contexts.

21.2 Context

A university is a very specific and in a sense 'unique' institution (Biesta & Simons 2009) in that it is multiple (id)entities at the same time (Heylighen & Nijs 2011): an institution of higher education where people study; a research institution where people conduct research; a built environment featuring campuses, buildings and rooms that accommodate students and staff; and an organisation with several departments, including technical services that take care of the accommodation. These multiple identities make a university an ideal setting for a field experiment.

A university is first and foremost an educational setting where people study. Since young people are educated as much by example as through teaching, environments that segregate teach acceptance of segregation, while inclusive environments teach inclusion (Welch & Jones 2001).

To some extent, a university is also a miniature version of society. Several actors involved in or affected by making built heritage more inclusive are present in its organisation: building owner, architects and other built environment professionals (*e.g.* building conservation specialists), services for construction, management and maintenance, and building users, *c.q.* students, staff, and visitors, both young and moving into old age, with and without disabilities. In line with the exigencies of a 'real' experiment, we can thus say that the university offers an 'ecological valid' setting.

Of all the actors present at a university, students, staff and visitors living with diverse abilities and conditions can be considered as "user/experts", a term introduced by Elaine Ostroff (1997) to denote "*anyone who has developed natural experience in dealing with the challenges of our built environment*". Their experiences may offer designers unique and expanded insights—see for instance (Pullin 2009, HHC 2009), yet in relation to built heritage their voices often remain silent. Built heritage is typically approached in an essentialist way that focuses on the built environment as such. Giving voice to disabled building users in improving its inclusivity, however, shifts the focus from built heritage to how people experience it. Such a relational approach resonates with social conceptions of disability which, unlike prevailing medical conceptions, place the body in its sociomaterial context, recognizing the interplay between physiological condition and features of the society one lives in (Butler & Bowlby 1997). In relation to built heritage, this move to embrace disability as a social issue can be traced in the strategic framework for access to historic and heritage buildings developed by English Heritage (Adams & Foster 2004). It is this framework which inspired us to

conduct a field experiment at our university to involve disabled students, staff and visitors in addressing inclusivity of built heritage on campus.

21.3 Origins and Set-Up

The idea to conduct the field experiment arises at a point when the university, in its role as building owner, decides to obtain expert advice from an official accessibility office on the inclusivity of its building patrimony. By way of trial one protected university building is subjected to an accessibility audit. The audit is performed by a professional accessibility advisor—a specialised architect—who assesses the building based on a standardised checklist, and formulates a proposal to address the problems identified in a phased way.

Rationale. The approach adopted in the field experiment is intended not as an alternative for, but rather as complementary to professional approaches like the accessibility audit. Instead of imposing certain solutions upon architects, it aims to inform them or at most make suggestions to them, offering a hold in making design decisions while leaving the actual design up to them.

Buildings. The buildings considered in the field experiment are protected buildings on campus. They are selected in consultation with architects of the university's technical services. Preference goes to buildings for which works are planned in the near future. So far three buildings are addressed: the *Van Dalecollege*, a 16th century college accommodating the university's student services and student housing; the *Arenbergcastle*, a 16th century building housing the architecture department; and the *Pauscollege*, a late 18th century college used as a dorm for 180 students plus a branch of the university restaurant. In an early version, the approach explored in the experiment was also applied to the *Grote Aula*, a 19th century auditorium used for lectures and music events.

Teams. Each building is analysed by five teams. Every team is composed of one user/expert and two Master students in architecture (or, in some cases, one student and one researcher). User/experts include students, staff and visitors with a mobility impairment (using a wheelchair, having difficulty walking), a sensory impairment (blindness, low vision), and a diagnosis on the autistic spectrum. The architecture students attend an elective course on inclusive design.

Teams visit the building considered and identify its qualities and weaknesses from the perspective of the user/expert in the team. Based on an earlier experiment with professional architects, not related to built heritage (Heylighen *et al.* 2009), we expected that during these visits a particular dialogue would develop between the user/expert on the one hand and the architecture students on the other hand: a dialogue that is embodied in nature, unfolds in situ, and involves a particular knowledge transfer (Heylighen & Nijs 2011). Through such a dialogue experience is being framed: both the user/expert and the (student) architect find themselves in a reflexive stance—reflexive about their experience of the building for the former, reflexive about design practice for the latter.

Output. The architecture students write an analysis report summarising the major insights gained during the visit of their team. The report is not normative in that it

informs about how the user/expert in the team experiences the building visited, rather than prescribing what should be altered. It is narrative in that it addresses the building's spatial qualities and obstacles in a way that respects the intricate relatedness of things in how the user/expert experiences it, rather than point-per-point (as in say a standardised checklist). The report is documented with photos and graphical material that resonate with architects' visual way of working.

Reports are shared and discussed with the other teams analysing the same building, thus augmenting their validity, and with architects and other built environment professionals of the technical services.

21.4 Framing Experience, Nuancing Inclusivity

The analysis reports offer a highly nuanced picture of the inclusivity of the university buildings visited, revealing issues that may be easily overlooked in making built heritage more inclusive or that built environment professionals may not be attuned to. Moreover, besides unforeseen issues to address, they also point to unforeseen opportunities for improvement.

Different Needs or Different Reasons

The teams' analysis reports of the building visits show how different the needs put forward by different people—or even by one person—can be. A user/expert who has difficulty walking, sometimes uses a wheelchair, but visits two university buildings (*Arenbergcastle* and *Pauscollege*) on foot. During these visits, he sometimes points at aspects that do not raise a problem at this point, but would if he were using his wheelchair; or vice versa. For example, slopes are very handy when in his wheelchair, but on foot he prefers a well dimensioned staircase to a slope, because on the latter he has more difficulty keeping his balance. Inclusivity reveals itself here not as a timeless and invariant feature (as it does in traditional approaches), but instead shows its ambiguity and situational character.

However, in addition to the differences in (and at times contradictions between) the needs pointed out by the user/experts, the analysis reports also reveal building aspects that are experienced as problematic by several of them. For example, the *Van Dalecollege*, *Arenbergcastle* and *Pauscollege* each have a courtyard covered with cobblestones. Their unevenness causes problems for several user/experts: for the person having difficulty walking it makes using a cane more difficult and increases the risk of stumbling; for the wheelchair users, it provides a bumpy ride; and for the blind participants it makes walking with a white cane difficult—cobblestones lying in the same direction cannot be felt as a guiding line.

Similarly, several user/experts complain about the (lack of) light in the *Pauscollege*. The architecture students collaborating with a person with low vision notice that the transition from dark to light(er) spaces—and the other way around—constitutes a considerable threshold for her. As her eyes need to adjust, she walks less swiftly and less spontaneously through the building. The recognisability of building elements diminishes considerably in dark spaces. For the architecture students it does not make a difference in which corridor they are

walking, yet they feel that the user/expert walks more cautiously through the darker corridors. A person with autism also mentions the lack of (sufficient) natural light in the *Pauscollege*, which he considers especially problematic in the long windowless corridors along the student rooms. Deprived of contact with outside, he does not know on which side of the building he finds himself. Interesting is also that the only corridor he finds beautiful, does have sufficient light. This enables him to better see how the space is finished.

More in general, several user/experts characterise the *Pauscollege* as unpleasant. The blind person finds the building "*not cosy at all*." It is "*way too big*" and there is "*not much order*". The user/expert with autism has the impression that "lumber is lying everywhere" which he finds disturbing. After the visit, he is happy to be outside again because he dislikes the interior of the building and has an oppressive feeling inside. Asked what he finds unpleasant, he refers to the "*prison corridor*". This specific corridor is more spacious than the other ones, but because the "prison *feeling*" prevails, he finds it particularly unpleasant.

In these examples some buildings aspects are pointed out as problematic by several user/experts, be it for different reasons. By not merely identifying problems, but explicitly describing the different reasons cited for them by the user/experts, the analysis reports can offer architects a better hold in designing more inclusive solutions. Standard or conventional formulations of problems tend to trigger standard or conventional solutions. By contrast, the descriptions of the reasons for these problems in different wordings (*e.g.* "*cosy*", "*lumber lying everywhere*", a vague "*too big*") or metaphors ("*prison corridor*", "*prison feeling*") leave designers more degrees of freedom through their semantic openness.

Still in the *Pauscollege*, another space the user/expert with autism finds beautiful is the hall with the old staircase. The hall is light and spacious, and the rustic wood offers a beautiful contrast with the white painted walls. More in general, old staircases in the different buildings are clearly appreciated by several participants. In the *Arenbergcastle*, for instance, a staircase in the porter's lodge is praised in several analysis reports for its comfortable dimensions and its handrail. The handrail does not only offer good grip, its banisters make the staircase clearly recognisable as such to a blind user/expert. Also in the *Pauscollege* one particular staircase is described as very comfortable and its handrail as offering good grip. These examples demonstrate that the analysis reports include building aspects that are *valued* by several user/experts, and not only those that are criticized by them. This enables architects designing inclusive solutions to build on strength instead of focusing on faults and weaknesses only.

In summary, then, the approach adopted in the field experiment shows that needs may differ considerably depending on the person or situation, thereby unmasking inclusivity of built heritage as ambiguous and situated in nature. For some buildings aspects, however, several user/experts agree that they are either problematic or valuable. This occasional convergence between different user/experts might suggest a certain 'universality' of the problem or solution considered, yet universality or generalisation is not an aim in itself here. More interesting is the fact that architects are offered insight in *why* user/experts either dislike or value certain building aspects.

Use and Organisation

When visiting the *Van Dalecollege*, two visually impaired user/experts point at the lack of clear organisation (Heylighen *et al.* 2010). A person with low vision has the impression that the building complex is not designed as a whole. He finds that having to search for a room is not very user-friendly, and increases the importance of inclusive signage. A blind person, for her part, finds the building inconveniently arranged. For her to use it independently would require a clear explanation of its appearance, location, orientation and structure. Nevertheless, she is able to find the reception by herself because it is near the entrance, where she would seek intuitively (and because of its smell, reminding her of a library or journals). The arrangement of the ground level seems relatively convenient to her, yet overall, she characterises the building as a true labyrinth requiring supreme concentration to navigate. A person with autism also has trouble with the lack of clear organisation. Except in places he is familiar with (because he has been there before), it is difficult for him to locate at which point in the building he finds himself.

When entering the main entrance of the *Arenbergcastle*, a blind user/expert is relatively quickly on to the fact that the building is structured around a courtyard. He derives this from what he hears. He describes the covered entrance as a passageway in between two buildings (he notices an echo), which is followed by an open space. The rectangular shape of the courtyard makes it easy to orientate himself. The secretariat of the department housed by the building, however, is located in an illogical spot: while he would expect it close to the main entrance, it is located in a side wing.

A user/expert having difficulty walking suggests changes to the castle's organisation as well. The entrance to the porter's lodge would be much more accessible to him when using the back door instead of the door giving on to the courtyard. The same applies for the seminar rooms. By considering the entrance via the current secretariat as a full entrance to the seminar rooms, people are not obliged to cross the bumpy cobblestones in the courtyard.

For a user/expert with autism, the experience of a space seems to be influenced considerably by its use. The entrance hall in the *Pauscollege*, for instance, has large windows which let in a lot of light. Still he does not find it a pleasant place to wait, as the noise of the drinking machine and of the people passing are too disturbing. Similarly, the big spaces in the *Arenbergcastle* used by architecture students as design studios, probably would not be very suitable for him to work. These spaces may be very busy, with students and staff running in and out. When entering the room you are directly confronted with the people present. For him, he says, the design studios perhaps would be better subdivided in smaller, structured spaces that are more or less separated from each other in terms of view and sound.

These examples illustrate how the approach adopted in the field experiment explores and evaluates built heritage as a physical entity, but also considers *how it works*. The problems experienced by the user/experts turn out to be caused not only by material barriers raised by the historic building itself; major problems—and thus also possible solutions—relate to how the building is used and how this use is organised. This attention for use and variation in use resonates with architects' core business: the organisation of space rather than the physical building as such.

New Weaknesses, Old Strengths

In the *Arenbergcastle*, recently introduced building elements turn out to cause major problems to several user/experts. A case in point are the concrete platforms that have been installed a few years ago in front of both entrances to the West wing, and which are experienced as highly problematic by a blind person, a person with low vision and one who has difficulty walking. They find the platforms very dangerous because of the lack of handrails, contrast and marks. The door handle of the new outside door is not easy to find, it is not recognisable as such and difficult to grasp. Inside the castle, the staircases causing most problems are the most recent ones: the spiral staircase close to the secretariat, and the lazy staircase leading to the staff room above the secretariat. The spiral staircase is experienced as very unsafe because the steps are irregular, a handrail is foreseen on the narrow side of the steps only, it is unstable and interrupted at two points. Interestingly, user/experts find the old staircases—near the seminar room and in the porter's lodge—much more comfortable.

Vice versa, historic elements not always turn out to be problematic; on the contrary. The different shapes of door handles throughout the castle offer a very pleasant surprise to a user/expert with low vision. Moreover, they mostly contrast very well with the door, which makes them clearly visible. She also appreciates the fact that within the castle and the porter's lodge the relatively logical structure of spaces is preserved, such that searching for a room does not take long. The rooms are orthogonal, which facilitates orientation.

A user/expert with autism seems to regret that the original functions are no longer visible in the way the castle is currently used. The building would be more readable to him if some relation existed between old functions, *e.g.* "kitchens" and "salons", and new ones. Although he realises that this is impossible as the building now has a completely different function, it would make the functional organisation better understandable for him by offering clues to orientate himself in the building. To him, overview and organisation are important in space, but also in time. Overview and organisation in time assist him in handling his environment and anticipating new situations.

Together these examples indicate that recent interventions in historic buildings are not always an improvement in terms of inclusivity; vice versa, historic elements are not always problematic. This suggests that the idea that inclusivity of built heritage is problematic as a result of its age, and that newer interventions are better, is undeserved. In other words, by shifting the focus from the historic building to how it works for people with diverse abilities and conditions, it becomes clear that built heritage may offer inclusive designers not only a major challenge, but also a source of inspiration.

21.5 Discussion

Feedback from built environment professionals of the technical services suggest that they value the analysis reports considerably. As one architect formulates it: "*I found the subjective analyses highly interesting and in many respects they actually*

taught me more than the objective analysis of the accessibility office. I find the added value thus very high." Compared to the accessibility audit conducted by the professional accessibility advisor, the architect especially seems to appreciate the nuanced approach adopted in the field experiment: "*An important aspect is the broadening of the term accessibility by including very diverse disabilities, also and above all those whereby the person is not "entirely" blind or chained to the wheelchair. The experience of the person with autism surprised me in the most positive sense: he uncovered in a very direct way problems (…) which we all do sense but never can point to that well.*"

Compared to the professional accessibility audit, the field experiment approaches inclusivity of built heritage on campus from a completely different angle. To some extent, inclusivity of the built environment can be—and often is—considered as what Bruno Latour (2005) refers to as a *matter of fact*. Similar to AIDS, poverty, global warming and equality, it is often something we are detached from, taken care of by state officials or experts, instead of something to which we, as a public, are exposed or attached (Simons & Masschelein 2009). Accessibility legislation translates inclusivity into facts (or indicators and averages) by fixing maximum heights of thresholds and minimum widths of doors, which in turn can be objectively measured by professional accessibility advisors performing accessibility audits. Rendering inclusivity to the realm of matters of fact, in which accuracy becomes the closing argument of professional experts, leaves those affected by it—the disabled people themselves—as seemingly incapable of joining the dialogue because they are supposedly no experts in the field (Heylighen & Nijs 2011).

As pointed out in the introduction, however, inclusivity of built heritage is often not covered by accessibility legislation, or considered as exception to the rule. The approach adopted in the field experiment acknowledges that there is hardly any regulation available to address inclusivity of built heritage (including several university buildings), and that the traditional specialisation and available expertise is inadequate to solve this problem. Therefore, the approach allows for a group of people to become concerned with or attached to this issue—architecture students, disabled students, staff and visitors, and staff of the university's technical services. In other words, inclusivity of the built environment is not presented as a *matter of fact*. Rather, through analyses of university buildings in collaboration with user/experts, it is made perceptible in the public sphere and gradually becomes a *matter of concern* (Latour 2005; Callon 2005).

Feedback from the architecture students suggests that they experience this alternative approach as highly motivating and insightful, but also as very unusual and therefore somewhat confusing. From other courses, they have become used to the fact that teachers have the necessary expertise to offer the (or at least a) solution, and they are surprised to discover that for this matter, this is not the case. In the real-world situation on campus, inclusivity of the built environment presents itself to the students as ambiguous and situated in nature. They learn to be affected in new ways by the same matter (Latour 2004; Despret 2004). Through the particular dialogue with user/experts *in situ*, *i.e.* in the protected buildings under consideration, the attention of the architecture students is being trained.

One user/expert attests to this learning process: "*[the student] was open to it. I could clearly notice that by talking to her*." The user/expert enjoyed participating in the building visits, and would like the approach to become a compulsory topic of the students' program, allowing more people to become attached to the issue: "*As an elective course, you only have motivated students. That's of course an advantage. But then it's something that is possible but not compulsory. (...) The more people you address, the more obvious it probably becomes. Maybe it's good to strive for a matter of course instead of possibility*."

Interesting to notice, however, is that even as part of an elective course, the approach has a major impact on local decision making. The insights gained through the visits meanwhile have motivated and informed the technical services to implement major alterations in some of the buildings visited. As we write, the *Grote Aula* undergoes major interventions to improve its acoustic comfort, which are directly motivated by insights gained through the analyses with user/experts. The outcome of these also played a crucial role in the negotiations with and convincing of the conservation authorities. For the *Van Dalecollege*, input from the user/experts unlocked the impasse the student services had ended up in (Heylighen *et al.* 2010). The lack of organisation pointed out by several user/experts inspired major organisational interventions to rearrange the student services more logically in the available space such that all students can consult them, and yet interventions which require touching the historic fabric remain limited (*ibid.*). Interestingly, these organisational interventions come down, to a large extent, to restoring the logic present in the original building, building upon its inherent qualities. By shifting the focus from the protected buildings themselves to how people experience them, it becomes clear that improving their inclusivity does not necessarily require supplementing the present situation with new (material) layers; leveraging concepts already present in historic layers may improve the value of the buildings from an inclusive perspective, while respecting their heritage value.

21.5 Conclusion

Is making built heritage (more) inclusive the proverbial exception to the rule? Or can we address it from a different angle? Starting from the real-world situation on a university campus, this paper has demonstrated that it is possible to approach inclusivity of built heritage in a different way. Key to the approach adopted in the field experiment is that it allows for a group of people to become concerned with or attached to this complex issue as a matter of concern, rather than considering it as a matter of fact. While the approach originally was not intended to be politic, it turns out to have a considerable impact on local decision making, which in turn impacts the inclusivity of built heritage on campus. Concerns do matter—and are (cap)able to matter—apparently! Therefore it is tempting to suggest transferring the approach to other real-world contexts. Yet, we should keep in mind that the field experiment took place in the 'unique' context of a university. In order to investigate to what extent the approach is transferable to other real-world contexts, we seek to extend the field experiment to protected buildings off campus. In

addition, it would be interesting to investigate how the skills developed by the architecture students involved in the experiment are received in their professional situation after graduation.

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References

Adams J, Foster L (2004). Easy Access to Historic Buildings. English Heritage, Swindon

Adriaensens I, Hendryckx M, Van Alsenoy J (1998). Het geheim achter een open deur (The secret behind an open door). Koning Boudewijnstichting, Brussels

Biesta G, Simons M (2009). Higher education and European citizenship as a matter of public concern. European Educational Research Journal 8(2):142-145

Butler R. Bowlby S (1997). Bodies and spaces: an exploration of disabled people's public space. Environmental and planning D: Society and Space 15, 441-433.

Callon M (2005). Disabled Persons of All Countries, Unite! In Latour B, Weibel P (eds.) Making Things Public. Atmospheres of Democracy. Centre for Art and Media & MIT Press, Karlsruhe & Cambridge, MA, pp 308-313

Despret V (2004). The Body We Care for. Body & Society 10(2-3):111-134

Gobyn R, Knops G (eds.) (2000). Erfgoedzorg in de 21ste eeuw. (Built Heritage Care in the 21st Century). Koning Boudewijnstichting, Brussels & Tijdsbeeld, Gent

Heylighen A, Herssens J, Froyen H (2009). Architecture Criticism Blindfolded. Proceedings of Include 2009. Helen Hamlyn Centre, London

Heylighen A, Neyt E, Baumers S, Herssens J, Vermeersch P (2010) Conservation Meets Inclusion. Model Meets Reality. In Clarkson P et al. (eds.), Proceedings of the 5th CWUAAT. University of Cambridge, Cambridge, pp 209-218

Heylighen A, Nijs G (2011). Studying (Architecture) in Dialogue with Disability. In Simons M et al. (eds.), Curating the European University. LUP, Leuven, pp 9-16

Latour B (2004). How to Talk About the Body? Body & Society 10(2-3):205-229

Latour B (2005). From Realpolitik to Dingpolitik or How to Make Things Public. In: Latour B, Weibel P (eds.) Making Things Public: atmospheres of democracy, pp 14-41

Ostroff E (1997). Mining Our Natural Resources: The User as Expert. INNOVATION 16(1)

Pullin G (2009). Design meets disability. The MIT Press, Cambridge

Helen Hamlyn Centre (2009) Challenge. Helen Hamlyn Centre, London

Simons M, Masschelein J (2009). The public and its university: beyond learning for civic employability? European Educational Research Journal 8(2):204-217

Welch P, Jones S (2001). Advances in Universal Design Education in the United States. In Preiser WFE, Ostroff E (eds.), *UD Handbook*, McGraw-Hill, Boston, pp 51.1-51.2